

**Paper reference 31761H  
Pearson BTEC Level 3  
Nationals Certificate, Extended  
Certificate, Foundation Diploma,  
Diploma, Extended Diploma**

**Information Technology  
UNIT 2: Creating Systems to Manage  
Information  
(Part B)**

**Wednesday 10 May 2023 – Morning  
Time: 2 hours**

**Y70534A**



**Pearson**

**YOU MUST HAVE**  
**activity6.rtf,**  
**activity7.rtf,**  
**partB\_database.accdb or**  
**partB\_database.mdb**

**YOU WILL BE GIVEN**  
**Nil.**

## **INSTRUCTIONS**

- **Part A and Part B contain the material for the completion of the assessment under supervised conditions.**
- **There are 40 marks for Part A and 26 marks for Part B, giving a total mark for the assessment of 66.**
- **Part A and Part B are specific to each series and this material must be issued only to learners who have been entered to take the assessment in the specified series.**

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## INSTRUCTIONS continued

- Learners **MUST ONLY** have access to **Part B** during this examination session.
- This booklet should be kept securely until the start of the 2 – hour supervised assessment period.
- **Part A** materials **MUST NOT** be accessed during the completion of **Part B**.
- **Part A** and **Part B** should be submitted together for each learner.
- This booklet should not be returned to Pearson.
- Answer **ALL** activities.

## INFORMATION

- The total mark for this paper is 26.

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## INSTRUCTIONS TO INVIGILATORS

**This paper must be read in conjunction with the unit information in the specification and the BTEC Nationals Instructions for Conducting External Assessments (ICEA) document.**

**See the Pearson website for details.**

**Refer carefully to the instructions in this task booklet and the BTEC Nationals Instructions for Conducting External Assessments (ICEA) document to ensure that the assessment is supervised correctly.**

**The 2 – hour Part B activities must be carried out under examination conditions.**

**The database and electronic templates for Activities 6 and 7 are available on the website for centres to download for candidate use.**

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## **INSTRUCTIONS TO INVIGILATORS continued**

**Learners must complete Part B on a computer using the templates provided and appropriate software. All work must be saved as PDF documents for submission.**

**Invigilators may clarify the wording that appears in Part B but cannot provide any guidance in completion of the activities.**

**Invigilators should note that they are responsible for maintaining security and for reporting issues to Pearson.**

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# INSTRUCTIONS TO INVIGILATORS continued

## MAINTAINING SECURITY

- Learners must not bring anything into the examination environment or take anything out.
- Centres are responsible for putting in place appropriate checks to ensure that only permitted material is introduced into the examination environment.
- Internet access is not permitted.
- Learners' work must be regularly backed up. Learners should save their work to their folder using the naming instructions indicated in each activity.
- During any permitted break, and at the end of the examination, materials must be kept securely, and no items removed from the supervised environment.

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## INSTRUCTIONS TO INVIGILATORS continued

- **Learners can only access their work under supervision.**
- **User areas must only be accessible during the examination session and only by the individual learners.**
- **Any materials being used by learners must be collected in at the end of the examination.**
- **Following completion of Part B all materials must be retained securely for submission to Pearson.**
- **Part A materials must not be accessed during the completion of Part B.**

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## INSTRUCTIONS TO INVIGILATORS continued

### OUTCOMES FOR SUBMISSION

**Each learner must create a folder to submit their work.**

**The folder should be named according to this naming convention:**

**[Centre #]\_[Registration number #]\_  
[surname]\_[first letter of first name]\_  
PartB**

**Example: Joshua Smith with registration number F180542 at centre 12345 would have a folder titled**

**12345\_F180542\_Smith\_J\_PartB**

**Each learner will need to submit 3 PDF documents AND their final database within their folder.**

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## INSTRUCTIONS TO INVIGILATORS continued

**The 3 PDF documents should use these file names:**

**ACTIVITY 6:**

**activity6\_[Registration number #]\_[surname][first letter of first name]**

**ACTIVITY 7:**

**activity7\_[Registration number #]\_[surname][first letter of first name]**

**ACTIVITY 8:**

**activity8\_[Registration number #]\_[surname][first letter of first name]**

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## INSTRUCTIONS FOR LEARNERS

**Read the scenario, brief and activities information carefully.**

**Plan your time carefully to allow for the preparation and completion of all the activities.**

**Internet access is NOT allowed.**

**You will complete the activities under supervision and your work will be kept securely at all times.**

**You must work independently throughout the examination and must not share your work with other learners.**

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**INSTRUCTIONS FOR LEARNERS continued**

**Your invigilator may clarify the wording that appears in Part B but cannot provide any guidance in completion of the activities.**

**Part A materials MUST NOT be accessed during the completion of Part B.**

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## INSTRUCTIONS FOR LEARNERS continued

### OUTCOMES FOR SUBMISSION

You must create a folder to submit your work.

The folder should be named according to this naming convention:

[Centre #]\_[Registration number #]\_  
[surname]\_[first letter of first name]\_  
PartB

Example: Joshua Smith with registration number F180542 at centre 12345 would have a folder titled

**12345\_F180542\_Smith\_J\_PartB**

You will need to submit 3 PDF documents AND your final database within this folder.

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## INSTRUCTIONS FOR LEARNERS continued

**The 3 PDF documents should use these file names:**

**ACTIVITY 6:**

**activity6\_[Registration number #]\_[surname][first letter of first name]**

**ACTIVITY 7:**

**activity7\_[Registration number #]\_[surname][first letter of first name]**

**ACTIVITY 8:**

**activity8\_[Registration number #]\_[surname][first letter of first name]**

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## Part B Set Task Brief

**You are advised to spend 10 minutes reading the Scenario and the activities you are to complete.**

**You may make notes and/or highlight information to use in the completion of the documents you need to produce for your activities.**

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### **TASK SCENARIO**

**Heather Burn Caravan Park has partially developed a database that will eventually merge with the database you created in Part A.**

**The park has 50 pitches.**

**A pitch is assigned to a caravan owner.**

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## Part B Set Task Brief continued

**There are three different pitch positions:**

- **Riverside – the pitch overlooks the river**
- **Woodside – the pitch overlooks the wood**
- **Central – the pitch does not overlook the river or the wood.**

**Owners have to pay a site fee and a council fee each year.**

**The site fee depends on the pitch position:**

- **Riverside – the basic site fee + 5%**
- **Woodside – the basic site fee + 2%**
- **Central – the basic site fee.**

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## Part B Set Task Brief continued

**Owners also purchase key fobs.**

**A key fob is needed to operate the car barrier.**

**Owners must purchase between one and three key fobs.**

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## Part B Set Task

**You must complete ALL activities within Part B.**

**Produce your documents using a computer.**

**Save your documents in your folder ready for submission using the formats and naming conventions indicated.**

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## **ACTIVITY 6: FORMS – You are advised to spend 1 hour and 10 minutes on this activity.**

### **NOTE**

- **The structure of the tables provided should not be changed in any way e.g. do not add validation to the tables, do not change data types.**
- **You will ONLY be required to use tblOwner, tblPosition and tblFee.**

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## ACTIVITY 6 continued

Create an efficient interface that will facilitate database input by producing:

(a) an input form to add an owner.

- The form should be ready for data entry.
- The surname must be present.
- The number of key fobs must be within the specified range.
- Valid data should be appended to the owner table, a save message should display and the form should be cleared ready for the next data entry.
- A suitable error message should appear where invalid data has been used.

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## ACTIVITY 6 continued

(b) an input form to analyse the effect of an increase in fees.

- The form must NOT include validation for any fields.
- The form must NOT include an automated routine to save the data.
- When the form opens this information must be automatically displayed in fields:
  - the highest year ID
  - the basic site fee
  - the council fee
  - the next year ID, which should be one higher than the current highest year ID.

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## ACTIVITY 6 (b) continued

- The user must then be able to input into fields:
  - the amount of the increase, e.g. £200, to be added to the basic site fee
  - the new council fee.
- The new basic site fee must then be calculated and displayed in a field.
- There must be a combo box in order to select the pitch position.
- Once the user has selected a pitch position the yearly site fee adjustment percentage, e.g. 5, must be displayed in a field.

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## ACTIVITY 6 (b) continued

- These details must then be calculated and displayed in fields for the position selected:
  - the new site fee
  - the total fees.

Evidence your interface as screenprints using the given activity6.rtf template.

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## ACTIVITY 6 continued

**Your screenprints must show:**

- the **DESIGN** view and **FORM** view of all the forms you have created
- the **DESIGN** view of any queries you have created and used with the forms including fields and criteria
- the **DATASHEET** view of any queries you have created and used with the forms
- details of any calculations, validation and macros/code you have created and used with the forms.

**Ensure sufficient information is provided to allow a competent third party to maintain the database.**

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## ACTIVITY 6 continued

**Save the evidence of your interface as a PDF in your folder for submission as  
activity6\_[Registration number #]\_[surname][first letter of first name]**

**(Total for Activity 6 = 14 marks)**

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## ACTIVITY 7: INTERFACE TESTING – You are advised to spend 20 minutes on this activity.

**Test the interface of your relational database using suitable test data (normal, erroneous and extreme as appropriate).**

**You must not add validation to any of the tables.**

**You must provide evidence of FORM LEVEL testing that proves:**

- 1. the owner input form is ready for data entry when the form opens**
- 2. the surname must be present**
- 3. the number of key fobs cannot be above the top of the range**
- 4. the number of key fobs cannot be below the bottom of the range**

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## ACTIVITY 7 continued

- 5. a record will save in the owner table if all the required data is present and valid**
- 6. these details appear on the fee analysis form when the form opens:**
  - the highest year ID**
  - the basic site fee**
  - the council fee**
  - the next year ID, which is one higher than the current highest year ID**

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## ACTIVITY 7 continued

7. once the user has input the amount of increase, the new council fee and a position has been selected, these details should be calculated and displayed in fields:
  - the new basic site fee
  - the new site fee for the selected position
  - the total fees for the selected position.

Complete the test log to show how you have tested your input forms using the given activity7.rtf template.

Save your test log as a PDF in your folder for submission as

**activity7\_[Registration number #]\_[surname]\_[first letter of first name]**

**(Total for Activity 7 = 6 marks)**

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## ACTIVITY 8: INTERFACE EVALUATION

– You are advised to spend 20 minutes on this activity.

**Evaluate your interface.**

**You should consider the quality, performance and usability of the interface you have created in terms of how well it ensures:**

**Owner form**

- the owner form is ready for data entry when the form opens
- the surname must be present
- the number of key fobs must be within the specified range
- a record will save in the owner table if all the required data is present and valid
- the form should clear ready for the next data entry.

**(continued on the next page)**

## ACTIVITY 8 continued

### Fee analysis form

- these details appear on the fee analysis form when the form opens:
  - the highest year ID
  - the basic site fee
  - the council fee
  - the next year ID, which is one higher than the current highest year ID.
- once the user has input the amount of increase, the new council fee and a position has been selected, these details are calculated and displayed in fields:
  - the new basic site fee
  - the new site fee for the selected position
  - the total fees for the selected position.

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## ACTIVITY 8 continued

**Save your evaluation as a PDF in your folder for submission as**

**activity8\_[Registration number #]\_[surname][first letter of first name]**

**(Total for Activity 8 = 6 marks)**

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**TOTAL FOR PART B = 26 MARKS**

**END OF PAPER**

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